

19990526.ba v02\_n561.bam.990526

>From ???@??? Thu May 27 01:55:25 1999  
Message-Id: <199905270045.TAA21138@sco.theporch.com>  
Date: Wed, 26 May 1999 19:45:14 CDT  
From: Old Tube Radios <boatanchors@theporch.com>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: BOATANCHORS digest 2561

BOATANCHORS Digest 2561

Topics covered in this issue include:

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- 3) Re: Non PLL synchronous detector  
by "Barry L. Ornitz" <ornitz@tricon.net>
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by AAFRadio@erols.com
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by thompson@mindspring.com
- 6) WTB: Drake T4XB Orig Manual  
by "Freeberg, Scott (STP)" <scott.freeberg@guidant.com>
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by "A. B. Bonds" <ab@vuse.vanderbilt.edu>
- 8) Spect util - was: Non PLL synchronous detector  
by polepeeg@aaa4rm.ba-watch.org (Marty's Refl. Drop)
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by John M Iverson <jackiv@juno.com>
- 10) HRO-500 Info.  
by Dennis Gehrke <DLG1@micron.net>
- 11) Trade: TMC GPR-90 for 75A1  
by "Mike Warren" <w5maz@earthlink.net>
- 12) re:s53 manuals  
by Maurice Weinschenker <morry@ix.netcom.com>
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by "John Gibson" <gibsonj@mindspring.com>
- 14) B&K Dynascan Parts?  
by Dexter Francis <cwest@xmission.com>
- 15) Boatanchor alignment aid  
by Morris Odell <morriso@vifp.monash.edu.au>
- 16) S-9er FB BA mod.  
by mnhopkins@juno.com

-----  
Date: Tue, 25 May 1999 23:33:30 -0400 (EDT)

From: William Donzelli <aw288@osfn.org>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: FS: Command set stuff  
Message-ID: <Pine.SUN.3.91-FP.990525232149.18562A-100000@osfn.org>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Before it goes to eBay (and skyrockets to insane amounts), here are a couple of hard to find goodies for you command set nuts:

MC-215 Spline - 10 and 15 ft. (approx.) - connects the BC-450-A (and friends) control box to the receivers. Yeah, they are long, and may need stretching out, but they do work - \$20/each.

IN-83 Insulating Beads - these are the dudes that insulate the antenna lead-in wires from your fingers. Each bag has 12 beads, each 5/16" long and able to slip over 12 AWG wire in a sort of "stacking" fashion. - \$1/bag of 12 beads (thats a hair over 3" of antenna lead-in). Figure out how many bags you need - I've got lots.

William Donzelli  
aw288@osfn.org

-----  
Message-Id: <199905260258.WAA12752@flash.naxs.net>  
From: "Barry L. Ornitz" <ornitz@tricon.net>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: Rust - some science behind rust protection  
Date: Tue, 25 May 1999 23:57:06 -0400

Jim Hill asked about methods to preserve steel panels that were already showing rust. He received numerous good answers. I would like to add a few additional comments and explain some of the technologies available so Jim and others can make intelligent decisions.

To begin, there is really no practical way of completely preventing rust. The best you can hope for is to delay rusting long enough that the useful life of a steel part is not shortened. All of this requires effort and there is no free lunch. At some point, the effort to prevent rust may no longer be justified.

The rust conversion method most commonly found is based on phosphoric acid. You mechanically clean off all easily removable rust with a wire brush or similar treatment. Then the acid is applied. It chemically oxidizes the remaining rust to a more stable form - black iron phosphate. The acid also reacts to dissolve base iron too, also forming iron phosphate. But the second reaction is slow compared to the first. The iron phosphate is insoluble and it adheres tightly to the iron. Some trade names are Naval

Jelly and Metalprep. The phosphoric acid treatment essentially treats the existing rust but it does not prevent future rust.

So, as Roberta noted, this is only the first step. After applying the acid, letting it react, and washing the excess off, the surface must be dried well. But then you have to apply paint to the surface to cover the exposed metal. Different paints may be used with oil-based alkyds being the best. You need a tough, impermeable paint to keep moisture and oxygen away from the metal below. But any paint, over time, will deteriorate and you will need to paint again.

Greg, KE4000, suggested a product called POR-15. I checked their web site and read their literature. Most of it is pretty informative but there are a few completely wrong statements (like how conventional paint "dries"). It appears that this is a variation based on silicate coatings.

An organic silicate polymer will chemically react with bare iron to form a tight bond based on insoluble iron silicate. The iron must be free of rust first for this to work well. This means sand blasting or other methods of cleaning to get to bare metal for optimal results. The resulting silicate surface is very tightly bonded to the iron, but the surface is not durable. It requires a top coat of paint for any long-term protection.

Probably the best protection that can be obtained is hot-dip galvanizing. This is probably not practical for many uses, but I recently had a discussion with a ham who sent his tower off to be re-galvanized. The price was far lower than I expected. Galvanizing is, of course, the coating of the iron with metallic zinc. The zinc provides galvanic protection of the iron which is about as good as you can get. The zinc must be applied over a rust-free surface. The rust removal is usually done by hydrochloric acid at the galvanizing plant.

Several manufacturers offer zinc-rich paints to try to achieve some of the benefits of galvanizing.

ZRC and LPS are two manufacturers. These do a slightly better job of preventing future rust than do ordinary paints. But because the zinc particles are in an organic binder with poor electrical conductivity to the iron and each other, the full benefits of galvanizing cannot be obtained. But these do not need a bare metal surface and can be coated over the phosphoric acid treated iron or steel.

The closest thing to a paint-on galvanizing is a combination of the silicate technology with zinc powder. In this case, the organic silicate binds to both the iron and to the zinc particles. But like the POR-15, the surface is easily damaged and needs a top coat of another paint.

Polyurethane or oil-based alkyd may be used, but two-part urethanes and epoxies are better. Tests by the Electric Power Research Institute have shown the inorganic zinc coatings to give protection second only to hot-dip

galvanizing. This inorganic zinc coating comes in a two-part can; one contains the organic silicate polymer, and the other contains powdered zinc. A gallon after mixing weighs over 20 pounds. Surface preparation is generally like the POR-15. Sand blasting to "near white" bare metal is preferred. High humidity or a moist surface is necessary to cause the reaction of the metals with the silicate. Once reacted, allow to dry for a few days before putting down the topcoat. Some manufacturers include: Cloverdale, General Paint, Glidden, Griggs, ICI, PPG, and Sherwin Williams. Most paint dealers will be totally ignorant of these products unless they are used to industrial paints; you need to be sure of what you are buying. Also expect to pay quite a bit. The last time I priced this paint, it cost over \$65 per gallon (about 3 years ago). Email me for the product trade names and code numbers if your local paint dealer cannot help you. By the way, most of the precautions stated for POR-15 also apply to this paint. Use of a respirator is generally required when spray painting this material.

This pretty much covers the possibilities for protecting iron or steel. The inexpensive techniques offer the least protection but can be used with minimal surface preparation. But the better techniques are quite expensive and require a clean surface. You pay your money and you make your choice!

73, Barry L. Ornitz WA4VZQ ornitz@tricon.net

-----  
Message-Id: <199905260427.AAA19792@flash.naxs.net>  
From: "Barry L. Ornitz" <ornitz@tricon.net>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: Non PLL synchronous detector  
Date: Wed, 26 May 1999 01:25:59 -0400

Arden Allen wrote:

>My interests are more along the lines of our BA interests, i.e.,  
>operating AM rigs and SWLing. In both cases synchronous  
>detection remedies the problem of AM carrier fade distortion  
>with fairly simple add-ons to a receiver. I was never concerned  
>with what has to be done at the transmitter end. I leave that  
>to the megalithic corporation engineers to work out.

Except you are confusing true synchronous detection with exalted carrier detection. The second can provide advantages with carrier fade but cannot provide all the other benefits of true synchronous quadrature detection.

>I don't know if any, let alone a little, DSB suppressed carrier  
>activity exists on the ham bands. If it does it is probably  
>where bandwidth is not contested (VHF, UHF?) and is received

>with an ordinary BFO or product detector with or without  
>sideband rejection filtering.

If used with a conventional SSB detector, sideband filtering must be used. It is seldom used because the proper reception methods were not practical when SSB became popular. Spectrum occupancy is a hotly debated issue. DSB is certainly better than AM in this regard.

>Hams don't get to transmit music so a complex Costas loop in a  
>commercial receiver would be out of the question. SWBC  
>stations, with the exception of the few SSB outlets, are  
>nowadays both SSB with full carrier as well as DSB with full  
>carrier. I don't think SSB has yet been understood by the lay  
>shortwave listener, they just turn on the radio and tune in the  
>station. Passive (automatic) synchronous detection could work  
>well especially with PLL tuned receivers but how many consumer  
>SW receivers are being made with it these days? My Grundig  
>Yacht Boy 400 should have it but doesn't.

No. most hams do not use DSB operation because the receiver (actually detector) requirements to take full advantage of DSB are quite stringent. Achieving these requirements used to be difficult and complex; today a few IC chips can handle the job. Drake, NRD, and several other high-end SWL receivers have synchronous detectors built in, and kits are available for other receivers. Professional receivers generally have ISB and DSB included. Almost all new cellular telephones have the quadrature down-mixing scheme needed for synchronous detection. And basically every DSP-based receiver uses this method too (but in software rather than hardware). The AM-stereo receivers (which never quite caught on) use synchronous detection with a single Motorola chip. Even many packet demodulators use software Costas Loops.

>As I previously stated, it prevents carrier fade distortion,  
>the most egregious problem with ionospheric AM reception. And  
>it's not much more complex than an ordinary SSB receiver,  
>economical to provide even in a consumer SW receiver these days  
>with application specific IC's.

Again you are thinking your exalted carrier detector is a synchronous detector, which it is not. All you have done is to provide a high level carrier to replace the original if it is lost in fading. True synchronous detection offers so much more - as I wrote earlier.

>>The answer is that DSB sends redundant information. With  
>>proper demodulation, interference in one sideband that is not  
>>identical to the interference in the other sideband is  
>>eliminated. Noise is not correlated between the sidebands so  
>>the DSB will have a signal-to-noise ratio advantage too.

Additional benefits include the fact that carrier heterodynes are not present as with AM, noise is reduced since only the in-phase component is detected, and even over-modulated signals are even recovered properly. None of these advantages can be obtained with exalted carrier detection.

>Probably why AM has held up against the competition, it being  
>cheaper to make AM only receivers. SSB has no real advantage  
>for channelized services like (ground wave) MWBC and (non-  
>ionospheric) VHF aviation.

AM is useful only because of super-inexpensive envelope detection. It is wasteful of power and spectrum. The reason for aviation use of AM is purely historical (which is why the FAA air navigation system is often 40 years behind current technology). It is interesting that the FCC was pushing ACSSB because of reduced spectrum usage. Newer digital technology killed this more than any deficit in performance (and there were several).

>>The other advantage of DSB gets much more involved in Fourier  
>>Series and such to explain, but it involves the wave shape of  
>>the modulating waveform.....

>And buried in that is the explanation for carrier phase  
>criticality I presume?

Arden, I am somewhat offended by this statement. I will be happy to go through the math, but I felt the group did not want this much detail. You really need to read some of the background theory first. I will list several references below which you can probably locate in any good university library. If not I can make you some photocopies. The problem is simply that SSB has great difficulty in reproducing sharp-edged waveforms. This fact has been known since the 1930's. Heavy audio speech clipping will work with AM and DSB but does not with SSB. The phase criticality is related to unwanted components in the Q-channel that detract from the performance of the synchronous detector - and this is a receiver concern, not a transmitter one caused by less than infinite bandwidth. The need for high phase accuracy of the local oscillator is analogous to the same requirement in phasing ISB systems where phase errors greatly reduce unwanted sideband rejection.

But let's get back to the effect wave shape has on the transmitter power rating. Stated simply, a SSB modulated transmitter will need an infinite PEP output to transmit a square wave. This is discussed fully in "Single Sideband Principles and Circuits" by three Collins engineers: Pappenfus, Bruene, and Schoenike. Also Bill Sabin had a good discussion of this in the ARRL Sideband for the Radio Amateur book where he discussed speech processing for SSB. Speech generates waveforms between pure sine waves and pure square waves in frequency complexity. For pure sinusoidal modulation,

SSB is preferred, but for square waves DSB is preferred. Highly processed speech is closer to a square wave.

>> Finally DSB requires a very low complexity transmitter.....

>

>But difficult to operate.

Ridiculous! Look at all the appliance operators who can operate a SSB rig. If you mean doing internal adjustments, DSB is much simpler than SSB and is comparable to AM in its simplicity.

>> .....Many CW and AM rigs are modified for DSB quite

>>easily.....

>

>Not with good carrier suppression.

But why is perfect carrier suppression needed? You will need a BFO on the receiving end even if synchronous detection is not used. If you received exalted carrier AM like you suggest, you cannot complain about the carrier here. The only real reason for good suppression of the carrier is to eliminate heterodynes from adjacent signals like you get with AM. Reasonable levels of carrier suppression are easily achieved with simple circuits.

>> .....And you still get the power savings over AM by not

>>transmitting the carrier.

>

>Saving power is not what hams seek, putting out more signal is what we want. Using the power producing ability of a final to transmit intelligence (instead of a dumb carrier) is what SSB is all about (beside getting rid of the !\*&^%\$X# heterodynes).

How true. But DSB is just as good in this regard when the proper detector is used. You lose half your power in a "mirror image" sideband, but this loss is immediately made up with a synchronous detector, with some extra advantages too. The interference suppression properties of synchronously detected DSB or AM are not possible with SSB. With the FCC now setting the maximum power of a ham rig by PEP output, DSB has some real advantages, especially over AM.

>> So there are advantages and disadvantages of both DSB and  
>>SSB. With spectrum being scarce these days, SSB uses less  
>>bandwidth. But DSB reception with the proper detector can give  
>>you some rewards for this extra bandwidth. For ham use, SSB is  
>>generally the winner. For Hi-Fi broadcast, DSB or SSB with  
>>pilot carrier might be preferred.

Let me add to this. A pilot carrier simplifies the carrier recovery so the

hard-limiting method works. However, only DSB allows the interference suppression characteristic of synchronous detection. SSB with carrier can only provide a SLIGHT power savings and it makes for a fairly complex transmitter. Full carrier must be used to be compatible with envelope detection. Reduced carrier will need a more complex detector. While exalted carrier reception can eliminate the effect of carrier fading, it cannot provide other benefits.

While not generally associated with amateur radio (yet), higher order phase shift keying (binary [BPSK], quaternary [QPSK], .. n-ary [n-PSK]) as used in modems and high-speed data links, generally uses variations of higher order Costas loops or an alternate technique known as Decision-Feedback Loops.

I feel that the history of why SSB was chosen over DSB is certainly of interest to Boatanchor fans. While DSB required a very simple transmitter, the complexity and poor reliability of the synchronous quadrature detectors using vacuum tubes made the system unpopular. As John Kolb wrote me, he could never get the FRR-48 receiver he had to work properly. And if John, extremely technically competent as he is, had problems with this receiver, imagine the problems an ordinary ham would have. [The same thing applied to computer technology too. Vacuum tube computer systems essentially reached their limit of performance in the mid- to late-1950's. Today's technologies are different with silicon microprocessors and with very complicated signal processing functions reduced to a chip or two. A Pentium or Motorola's C-QUAM decoder would essentially be impossible to build with vacuum tubes.]

73, Barry L. Ornitz      WA4VZQ      ornitz@tricon.net

#### References:

- D. E. Norgard, "The Phasing Method of Single-Sideband Reception," Proc. IRE, Vol. 44, Dec., 1956.
- J. P. Costas, "Synchronous Communication," Proc. IRE, Vol. 44, Dec., 1956.
- J. K. Webb, "Synchronous Detection Adapter for Communications Receivers," CQ, June, 1957.

and especially the section on analog demodulation (Chapter 8) in:

- U. L. Rohde and T.T.N. Bucher, "Communications Receivers, Principles and Design," McGraw-Hill, 1988.



-----  
From: AAFRadio@erols.com  
Message-ID: <374BD4C1.B1E5C906@erols.com>  
Date: Wed, 26 May 1999 07:02:25 -0400  
MIME-Version: 1.0  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: Non PLL synchronous detector  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Barry L. Ornitz wrote:

> I feel that the history of why SSB was chosen over DSB is certainly of  
> interest to Boatanchor fans. While DSB required a very simple transmitter,  
> the complexity and poor reliability of the synchronous quadrature detectors  
> using vacuum tubes made the system unpopular.

Barry has done his usual thorough job of explaining the merits, and a couple of more tidbits might be of some interest. When I sent John Kolb the original 1956 IRE references some eons ago, I pointed out that the editors had tried the interesting tactic of publishing Dr. Costas' defense of DSB in an entire issue devoted to SSB! Costas touched on most the same benefits Barry mentioned. I fully expected to read a firestorm of hot debate in letters to the editor during succeeding months, since the rest of the December Journal's articles were gushing over the wonderful promise of SSB. But guess what? I found only a \*single\* letter mentioning the article in the next six months...and it was supportive! By then, of course, the tide had already turned toward SSB - the bandwidth issue was one of concern in an era of rapidly growing spectrum requirements - and perhaps the technology wave posited by Dr. Bob Lucky a few years ago was full of the technology surfers. The bandwidth issue is not all black and white, BTW, but I won't go into it here. If anyone is interested, I'll try to scan both Don Norgard's and Costas' articles and make them available electronically (if I can find them...) :-)

73,  
Mike Hanz KC4TOS  
Herndon, VA

-----  
From: thompson@mindspring.com  
Message-ID: <004101bea771\$409e1ec0\$6ce045cf@default>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Clegg alignment  
Date: Wed, 26 May 1999 08:14:05 -0400

I pulled the Clegg Interceptor (A) alignment off the web. The images need to be blow up some. If anyone needs them send me a Large SASE (6 pages).

These are not in the normal instruction book.

Dave K4JRB

-----  
Message-ID: <21B46CBD022AD1118F0500805F15A0680110693B@stpmsx05.stp.guidant.com>  
From: "Freeberg, Scott (STP)" <scott.freeberg@guidant.com>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: WTB: Drake T4XB Orig Manual  
Date: Wed, 26 May 1999 09:06:13 -0500  
MIME-Version: 1.0  
Content-Type: text/plain

Hi,

My previous WTB post resulted in a good R4B manual, thanks Randy. Still looking for an original Drake T4XB manual and AC-4 manual. Thanks.

73, Scott WA9WFA

-----  
Message-Id: <3.0.1.32.19990526100832.00bb0100@vuse.vanderbilt.edu>  
Date: Wed, 26 May 1999 10:08:32 -0500  
To: Old Tube Radios <boatanchors@theporch.com>  
From: "A. B. Bonds" <ab@vuse.vanderbilt.edu>  
Subject: Re: Idea for Restoring National Dial Disks  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

At 09:19 PM 5/25/99 -5, you wrote:

>I have used "000" or "0000" steel wool for that for a long time.

>Don't want to use it where paint or decals are on the surface.

>Howard K5JCP

>

Simichrome metal polish also works very well.

A. B. Bonds

-----  
Date: Wed, 26 May 1999 11:19:07 -0400  
From: polepeeg@aa4rm.ba-watch.org (Marty's Refl. Drop)  
Message-Id: <199905261519.LAA09071@aa4rm.ba-watch.org>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Spect util - was: Non PLL synchronous detector

Decent flap going on inside this thread

I've been on 15 & 10 SSB & CW the last 2 Sunday late afternoons. Both bands have F2 openings everywhere... but there's no US hams to be found in the traditional places like 21-21.1, 21.3-21.4, 28-28.1 & 28.5-28.6 (anyone smell a KWM-1 rat?)

Call CQ & you feel like a DX-pedition.

Think all the US "short wave hams" save it up for contests, lurk on reflectors, haunt auction websites, or socialize/hawk @ hamfests.

We don't need no steenking thots of best spectrum utilization. Part 97 just names pct.s mod. (am) & mod. indexes (fm).

So on AM (yes that's SSB too), just do what you want 'til someone complains - then be nice 'cause you're not breaking any law. Just be nice tho.

We don't need no steenking thots of best spectrum utilization... we've moved ebay.... or in aa4rm's case, he's cutting metal to re-fab a '49 Miller dual-stage double-tuned hi-fi TRF (8/49 Radio Electronics art'l by Harvey Gernsback, yet. Ralph-124c? Hugo's kid?).

Marty

-----  
To: Old Tube Radios <boatanchors@theporch.com>  
Cc: william@ans.net, rhstein@interaccess.com  
Date: Wed, 26 May 1999 11:36:56 -0500  
Subject: TU-6-B FS  
Message-ID: <19990526.113739.8678.15.jackiv@juno.com>  
From: John M Iverson <jackiv@juno.com>

In house cleaning i found a nice TU-6-B, in case (for bc- 375 etc) want 20 bucks don't want to ship. could deliver to the meet in soo city on june 4-5.

73 jack

Jack Iverson K0EWU jackiv@juno.com  
ARRL, IEEE LM, RCA, AMI, ARCI, QCWA,CCA

-----  
You don't need to buy Internet access to use free Internet e-mail.  
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or call Juno at (800) 654-JUNO [654-5866]

-----  
Message-ID: <374C37BE.7C49CF05@micron.net>

Date: Wed, 26 May 1999 12:04:46 -0600  
From: Dennis Gehrke <DLG1@micron.net>  
MIME-Version: 1.0  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: HRO-500 Info.  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Dear Boatanchor Friends,

I am looking for information on identifying HRO-500 models . I am also looking for someone who is qualified to repair these radios. Any help would be greatly appreciated.

73's

Dennis Gehrke  
KC7VXD

-----  
Message-ID: <008601bea7a3\$46a55220\$0c0d010a@mike-warren.fs.com>  
From: "Mike Warren" <w5maz@earthlink.net>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Trade: TMC GPR-90 for 75A1  
Date: Wed, 26 May 1999 13:12:10 -0500  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Hi All,

I have a TMC GPR-90 in the original case with matching speaker. It is in excellent cosmetic, mechanical and electrical condition and includes the original manual.

I also have a very nice 32V2 that I would like to find a 75A1 to pair with it.

Anybody interested is a straight trade? The 75A1 should be in comparable condition and include case and speaker.

73,

Mike Warren  
W5MAZ (in MN)

-----  
Message-ID: <374C4BED.248F972B@ix.netcom.com>  
Date: Wed, 26 May 1999 15:30:54 -0400  
From: Maurice Weinschenker <morry@ix.netcom.com>  
MIME-Version: 1.0  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: re:s53 manuals  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

need a manual or schematic fer a hallicrafters s-53. i know this stuff  
is available somewhere on the net. any help out their?????????????  
mny tn timer advance  
best 73 morry k3dpj

-----  
Message-Id: <199905262059.QAA06039@smtp0.mindspring.com>  
Date: Wed, 26 May 1999 14:03:47 +0100  
Subject: Thinning Out test equipment  
From: "John Gibson" <gibsonj@mindspring.com>  
To: Old Tube Radios <boatanchors@theporch.com>  
Mime-version: 1.0  
Content-type: text/plain; charset="US-ASCII"  
Content-transfer-encoding: 7bit

Selling :

HP606B RF sig gen. Good working order. \$75.

Hickok tube tester AN/USM-118A cardmatic type complete  
with test cell and all calibration cards. Includes 4000 card library in a  
matching case. Excellent condition , with all manuals. \$200. For LOCAL  
pick-up only.

John

Gibson.

-----  
Message-Id: <103130301b37231ae8a36@[166.70.7.17]>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Date: Wed, 26 May 1999 16:23:05 -0700  
To: Old Tube Radios <boatanchors@theporch.com>  
From: Dexter Francis <cwest@xmission.com>  
Subject: B&K Dynascan Parts?

Greetings all-

I am trying to get a B&K Dynascan Tube tester back on line and was hoping

that someone could tell me if spare knobs can be obtained anywhere. I need to replace the Selector knob. It's a 12 position rotary switch with the knob having a numbered, transparent skirt. I can't tell from the illustration on the manual what direction the numbers went and need to figure out what the phase angle is between the shaft position with the flat and the numbers on the skirt of the knob. This unit is a Model 607/667. (The original knob is missing.)

-df

Thank you for contacting us!

Visit our Web Site at:

<http://www.xmission.com/~cwest/>

CWest - P.O. Box 22443 SLC, UT 84122

-----  
Message-ID: <374C865B.FBE74B4F@vifp.monash.edu.au>

Date: Thu, 27 May 1999 09:40:11 +1000

From: Morris Odell <morriso@vifp.monash.edu.au>

MIME-Version: 1.0

To: Old Tube Radios <boatanchors@theporch.com>

Subject: Boatanchor alignment aid

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Hi all,

While this question concerns a solid state device, it's only used here to align real boatanchors - honest!

It's a Tektronix 2901 time marker generator with a cold crystal oven problem. There's a burnt out resistor connected between the main PC board and a pin on the octal crystal oven socket. The voltage across the burnt out remnants is 190 volts AC (240 volt mains here). The "oven" neon does not light.

Does anyone know what value this should be?

73 de Morris VK3DOC

-----  
To: Old Tube Radios <boatanchors@theporch.com>

Date: Wed, 26 May 1999 19:41:11 -0500

Subject: S-9er FB BA mod.

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From: mnhopkins@juno.com

OK, I was just kidding when I suggested tossing all but one of the original knobs on an SX-88 and replacing them with random choices from the junk box. Not that it is not a great idea. My pal Frank does that because it makes him "faster in a pileup." But many here object to modifying vintage sets, which brings us to May, 1959.

In CQ for that month, Jim Kyle, W5JKX, offered his latter day S-9er -- a reversible mod for those old clunkers we keep that have octal tubes in the front end that arrived during the model run of the SW-3.

Jim's plan is simple: Just graft in a 6BZ7 or a 6BS8 on a plug in octal base. Then old faithful can have a Wallman cascode front end like the high toned Tapetone Skysweep on page 23. Later, but not much later, folks begin to suggest you need a Nuvistor, Brother, right here in River City, to keep up. But that ain't so. Your trusty old TV tuner tube will run with the big boys up thru 2M so it should have no trouble fixing, say, the SX-28 K2IEG uses it on over at page 48.

Yep, the May '59 CQ, with Wayne Green still at the helm, was a "Special Receiver Issue" indeed. Even has a Neil Alpha Six on page 119.

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End of BOATANCHORS Digest 2561  
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